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STUDY OF DIFFERENTIAL INTEREST RATE AND SELECTIVE CREDIT CONTROL POLICY

DRAFT

4. It is in the light of all these pertinent issues and empirical evidence that the African Alternative Framework to Structural Adjustment Programme (AAF-SAP) recommended the selective use of differential interest rates and selective credit control policy in such a way that interest rates on loans for speculative activities would be greater than the rates on loans for productive activities so as to shift resources to productive use. This recommendation was in line with the main policy directions of AAF-SAP which broadly covers enhanced production and efficient resource use, greater and more efficient domestic resource capacity, strengthening the scientific and technological base, vertical and horizontal diversification.

5. The purpose of this paper is to present the theoretical and empirical issues relating to a selective credit control and differential interest rate policy and make proposals for the design and application of these policies in African countries. Accordingly, Section I of the paper reviews the theoretical considerations for differential interest rate and selective credit, particularly with respect to their applicability to developing countries, while Section II surveys the empirical evidence in the design and application of the policies in developing countries in general. Section III makes proposals for the basic strategies application of differential interest rates and selective credit in Africa and Section IV explores the trade-offs and complementarities between differential interest rate and selective credit policy and other macro economic policies. Section V gives some concluding remarks.

SECTION I: THEORETICAL CONSIDERATIONS OF DIFFERENTIAL INTEREST RATE AND SELECTIVE CREDIT POLICY

1.1 Interest Rates Theory and Its Validity for Developing Countries

6. In recent years persistently high interest rates in developed as well as developing countries have renewed considerable interest in the theories of interest rate determination and the relationship between inflation and interest rates. The rate of interest, in the classical analysis of full employment of resources, is determined by the real forces of saving supply and investment demand. Money has nothing to do with the determination of the rate of interest. The supply of money enters the framework as a determinant of only the absolute price level of output and does not influence the rate of interest which remains a real variable. In turn, the quantity of money demanded depends only on transaction and income. In this classical framework, the interest rates were determined on the basis of the interaction between the time preference of individuals and the marginal productivity of capital rather than by monetary factors.

7. With the introduction of money into the analysis, the loanable funds approach and the liquidity preference or portfolio approach were developed. Unlike the classical school, the liquidity preference theory assumes that changes in the supply of money can influence the rate of interest which, in turn, will affect the volume of investment spending and, consequently, the level of aggregate demand, output and employment in the economy. According to this framework, the interest rate is purely a monetary phenomenon being determined by the demand for and supply of money. It is postulated that equilibrium between savings and investment is brought about through changes in income and output and not through the rate of interest which is closely related to monetary factors.

8. The periods of inflation that occurred in many countries of the world necessitated that a distinction be drawn between the money rate and the real rate of interest. When individuals anticipate higher rates of inflation they would expect nominal rates of interest to reflect this increase. Indeed, in an economy with competitive financial markets, the forces of demand for and supply of funds will establish nominal interest rates on deposits (which are positive in real terms) since savers will be induced to hold financial rather than real assets, and, on average, real assets will increase in nominal terms at the rate of inflation. Thus, the nominal deposit interest rate will be equal to the expected rate of inflation plus a small underlying real rate which provides the incentive to hold financial rather than real assets. The lending rate is positive in real terms because it is based on the cost of deposits (that is, the rate paid to depositors) and on the cost of bank intermediation (such as reserve requirements, taxes, risk,

administrative costs, overhead and the return to equity). Thus in this formulation, it was possible to infer that the expected real interest rate - a crucial determinant of investment and saving behaviour - would remain constant. Monetary changes that generated inflation would only affect the nominal interest rate and will have no direct effect on the real interest rate, real economic activity or upon relative prices.

9. However, subsequent studies demonstrated that a rise in anticipated inflation may depress the expected real interest rate, thereby causing a less-than-unity impact of anticipated inflation on nominal interest. The rationale is that a rise in anticipated inflation depresses equilibrium real cash balances, thus resulting in an increase in saving to compensate for the real balance effect. Equilibrium is restored by means of a lower real interest rate, which elevates the level of investment until it is equal to the higher level of saving. A rise in anticipated inflation may also induce people to shift out of money balances into real capital, thereby depressing the marginal product of capital and the real rate.

10. More recently, economists in developed countries have realized that the relationship between changes in anticipated inflation and interest rates ought to be adjusted for the tax effect, especially the effective tax rate applied to interest income and capital gains. Subsequently, a number of attempts have been made to develop more comprehensive models incorporating macro-economic effects as well as tax effects. These models have shown that the rate of change in interest rate with respect to expected inflation was affected by income, liquidity, and employment as well as interest income, personal income, company income and capital gains taxes, and concluded that the nominal interest rate would increase by more than the expected inflation rates.

11. The more recent theory that links interest rates with exchange rates stresses the potential substitution, in an open economy, between assets denominated in domestic currency and assets denominated in foreign currency, rather than the substitution between goods and assets that form the basis for a closed economy. This uncovered interest parity theory predicts that the nominal interest rate on domestic assets will be equal to the "world" interest rate adjusted for the expected rate of devaluation. In the case of a large devaluation, for example, the resulting capital outflow would raise local interest rates until the interest rate differential or spread between local currency and foreign currency assets just cover the expected rate of devaluation. If the expected rate of devaluation exceeds the expected rate of inflation differential -- which may occur when a currency is highly overvalued -- local real interest rates will be extremely high and this would simply reflect the public's increased desire to borrow in local currency and to lend or deposit in foreign currency, assuming that there is a free movement of international capital

12. However, it was observed that in many countries consumers usually

try to reduce their exposure to inflation tax and forced saving implicit in the above theories by shifting out of money balances into real commodities, art objects, real estates, precious metals and foreign currencies (the so-called "inflation hedges"). While paying interest rate on saving and charging it on credit extended is an accepted practice in all countries after it has been reconciled with the labour theory of value by interpreting interest as a compensation for the use of someone else's "past labour", the decisions on interest rates continue to be influenced by ideological and distributional considerations. Thus, in a number of cases high cost of credit to low priority sectors has served to finance the effective interest rate subsidy to priority sectors receiving low-cost credit. Such financing is justified if the authorities believe that the expenditure is worthwhile but exceeds the revenue that they deem prudent to collect through conventional taxation. The implicit rationale of such second-best credit and interest rate policies hinges on whether, by covertly taxing he holders of money balances, the authorities can collect the revenue in excess of the value that would be obtained by maintaining financial equilibrium.

13. Generally, the above theoretical analysis of interest rates has been unable to fully or satisfactorily explain the behaviour of interest rates in developing countries. this is perhaps due to two basic difficulties. Firstly, econometric models estimated for a particular sample period have tended to perform poorly outside the sample period. Secondly, since both expected inflation and consequently the expected real rate of interest are unobservable variables, attribution of movements in interest rates to either of these components has depended essentially on the case of proxies to represent their behaviour. Thirdly, in a developing and financially repressed economy, one would not expect the interest rates to behave in the same manner as in a financially developed system of the advanced countries.

14. In developing countries, focus has been shifted to examining how interest rates can be determined so as to serve the purpose of economic development. Indeed, in countries where money and capital markets are less developed and imperfect, the authorities need to take into account both the social and economic rates of return on different investments and the social cost of funds used to finance them. Thus, in order to offset the effects of the market distortions in investment, production, prices, foreign exchange transactions, and foreign trade, most developing countries have implemented corrective measures on interest rates through direct or indirect administrative mechanisms.

15. In theory, however, developing countries were often advised to maintain relatively high positive real interest rates (i.e. nominal interest rates in excess of inflation) through adjustment in nominal rates by liberalization or discretionary action rather than through control of inflation. The resulting high nominal rates have tended to

encourage speculative activities and discourage the expansion of productive capacity of the economy. As a result, developing countries have imposed administrative ceilings on nominal rates and, consequently, variations in the inflation rates have often determined variables in the real rates of interest. Countries with relatively high average inflation rates had recorded relatively low average real rates of interest and, in some cases, even negative real rates. It is argued that relatively low or negative real interest rates are generally not a problem, in and of themselves, but a symptom of the lack of co-ordination between monetary, fiscal, exchange rate and tariff policies.

16. The arguments behind this approach of ceiling nominal rates and keeping relatively low interest rates center around the stimulation of the level of desired investment by keeping financing costs low, assuming that funds to finance additional investment would be available. Usually in market-oriented economies, private rates of return generally guide a large part of investment decisions. But, in cases where such decisions diverge widely from social rate of return, the authorities frequently intervene to administer interest rates and credit allocation to offset the divergence, typically through low interest rates accompanied by selective credit arrangements.

17. Likewise, the theory that interest rates are determined in the short-run by flows of international capital and that these rates are tied to industrialized countries' interest rates adjusted for devaluation (interest rate parity theory) is not supported in developing countries because of structural and financial imperfections. Tying local interest rates to world rates does not guarantee positive real rates. However, rising world inflation in the seventies and eighties have fueled local inflation rates in developing countries, causing negative real interest rates.

18. The new theoretical perspective for developing countries stresses the need to increase the reliance on interest rates policy for the mobilization of savings, the allocation of resources to productive uses and the distribution of income. It is felt that there is need not only to maintain the positive real interest rates, but also to differentiate them in order to reflect differences in risk, maturity and costs, with the sole aim of promoting economic development rather than speculative activities. Thus, policy recommendations often emphasized that lending and deposit rates should be positive in real terms and intermediation spreads should provide an adequate return to financial institutions, since financial markets and interest rates cannot be considered in isolation.

19. However, apart from regulating the overall level of credit as a means of controlling economic activity as a whole, monetary policy makers in developing countries have attempted to influence the distribution of credit among various activities through the use of selective credit control. A basic assumption underlying selective

credit policies is that it is possible to redirect real resources to particular productive activities through a reallocation of financial resources. This hypothesis, which has wide support from protagonists of allocative credit policies, has become contested especially in the recent period of advocacy of the supremacy of market forces. Some analysts argue that market determined interest rates, in combination with appropriate external and domestic macro-policies, are a necessary condition for channeling financial resources through the banking system: from savers to investors, which in turn should lead to increased economic growth. Yet, resistance to decontrolling interest rates is still strong in most developing countries. Thus, no clear consensus has been reached in developing countries on whether the financial system with free market interest rates will provide a pattern of credit allocation that is socially more desirable. Nonetheless, the whole problem underscores the fact that formulating an appropriate single interest rate policy in developing countries is an exceedingly difficult task, and most probably undesirable.

1.2 The Basis for Differential Interest Rates and Selective Credit Control

(a) General Consideration

20. Several studies have shown that even in the free market economies, there is rarely one single interest rate. More often than not, there are different interest rates corresponding to the class of debtors, the maturity of loans, grace periods and forms of payments of principal and interest and hence the many structures of interest rates. Indeed, the interest rate is a complex variable whose level has to be explained by many factors; some of them "real", like the time preference of consumers and the productivity of capital and new investments; some of them "financial", which are generally affected by Central Bank Policy in order to reach its objectives such as price stability, full employment of resources, attainment of balance of payments equilibrium and maintenance of economic growth. Furthermore, nominal interest rates are influenced by inflation expectations which also affect the rate of savings (expected income) and the efficiency of investments through expected prices of inputs and outputs, expected position of markets at home and abroad, etc. The real determinants of interest rate are time preference of consumers and the productivity of capital and new investments. The financial determinants are Central Bank Monetary Policy. Thus, there is no "a priori" presumption for the determination of differential interest rates, and free market determination may be high or low and yield positive or negative real interest rates. When freely determined or fixed, the needs for development imply that the determination of differential interest rates by market forces may be inadequate.

21. Differential interest rates have been used extensively to serve the objective of channeling credit to key industries and priority sectors at

the expense of credit to other low-priority sectors. Institutional lending rates are determined, as margin requirements, collateral percentages, etc. on the basis of a variety of criteria such as the size of loan, maturity, and source of the funding. The lending institutions, which are predominantly influenced by a State National Bank, are compensated fully for low interest rate loans to priority sectors through the rediscount systems, or lower reserve requirements and limitations imposed on normal credit expansion non priority sectors so as to provide indirect incentive for banks to extend subsidized credit to priority sectors. Selective credit controls have also been utilized to contain the flow of credit for the speculative holding of inventories in order to restrain increases in prices of commodities in short supply, and to increase the flow of credit to production. The differencial between deposit and loan rates are sometimes financed through budgetary allocation of financial institutions.

22. The more active use of interest charges on credit, intended to moderate the demand for funds and to raise the efficiency of their use has followed two approaches. The prevalent approach has been to charge different interest rates to various sectors and/or for various purposes in order to give financial support to specific priorities and to restrain credit demand by non-priority purposes. The other approach has been to charge a flat rate in order to introduce some general standards of efficiency for the use of funds.

23. Selective credit control has been used to offset harmful effects of inflation and excessive investments in speculative inflation hedges such as stocks, foreign exchange and land. It is argued that selective credit control can allow the country to reach higher rates of savings and investment, without creating distortions in the allocation of productive resources. Further, selective controls are seen as one of the means to prevent runaway inflation. For example, if a large budget deficit or a surplus in the balance of payments cannot be prevented, a secondary expansion of bank credit could be mitigated with selective credit measures. In addition, if inflation is likely to be concentrated in some areas (for example, imports), then selective controls can be good substitutes for a general restriction on credit.

24. The other issue relating to the theoretical underpinning of investment demand under differential credit rationing, is whether the firm's investment expenditure decisions depend on the availability or the cost of credit. The first attempt to provide a rationale for the link between expenditures and credit was the neoclassical development of the "debt-expenditure" hypothesis according to which investment is financed by borrowing, the release of cash holdings and sale of financial assets. In theory, investment is a decreasing function of interest rate. Once the latter is given, investment demand, and thus financial flows, are determined. But changes in interest rates may denote reduced or increased finance depending on the manner in which the supply and demand curves shift. Thus, at any given level of interest

rates, if the individual is not permitted to borrow as much as he wants and if attempts by him to offer a higher rate of interest than quote are in vain, then the level of investment will not only be a functio of rates of return and the cost of financing, but also of the amount credit available. According to conventional analysis, under rationing the firm would borrow up to the constrained level of credit supply irrespective of the interest rate, as long as the latter remains belo the level where the constrained supply curve and demand curve for credi meet.

25. Another systematic explanation of financing constraint unde differential interest rates appears in the form of the so-calle "Availability Doctrine". The principal proposition of the availabilit doctrine is that small variations in the interest rate on governmen securities, resulting from open market opetations, may be effective i influencing real expenditures even if they are relatively interes inelastic. This is because the effect of an increase in interest rat may be transmitted through a reduction in the availability of funds fr financial intermediaries, rather than directly through the increase i the cost of borrowing as in orthodox theory. This reduction i availability of credit would then reduce real expenditures. Most of th literature on the "Availability Doctrine" has focussed on the mechanis whereby changes in the availability of funds from financia intermediaries influence investment expenditures and credit is derive from the effect of credit rationing on loan demand.

(b) Case of Developing Countries

26. There is a widespread reluctance among developing countries t allow one single interest rate determined solely in the market. This i because in these countries, interest rates are expected to serve variou policy objectives other than bringing the demand for and the supply o funds into equilibrium. As a result, there is a tendency to appl differential interest rates. There are various reasons for grantin preferential interest rates including market failures, economies o scale, external economies and diseconomies and infant industr requirements. The other reasons may be political and socia considerations, such as, special needs of industries of nationa interest of housing needs of low income groups. However, the selection of priority sectors and activities for preferential interest rates mus be specific to the structural conditions and the policy goals of eac country. Therefore, the selection may vary from one country to anothe and from one period to another depending both on the evolution of th country's structural conditions and government policy goals.

27. Selective credit control in developing countries may be used fo the control of inflation and as development policy. Hence credi control is for equalizing private and social profitability as a tax subsidy scheme, and realizing the externalities of high priorit sectors. Selective credit control is often sanctioned because of the

reasons of distribution, employment and structural changes that are missed by the impact of aggregative monetary policy. But monetary and credit policies can be combined with fiscal policy to promote development.

28. As to the determination of differential interest rates, it must be noted that fixing them at a constant level may yield negative rates especially on bank deposits and this may weaken financial intermediation and be detrimental to development. As was indicated above, very low real rates of interest may also be inefficient for savings and production, encourage excessive demand for credit and worsen balance of payments deficits due to the transfer of savings abroad. On the other hand, market interest rates are inappropriate in developing countries because their financial markets are too narrow and easily manipulated by monopolistic or oligopolistic power; changing rates of inflation cause prices to move unevenly so that adjusting interest rates to prices produces uneven effects and very high nominal rates; with foreign debts, such high nominal interest rates affect production costs and force government to make unnecessary debt concessions. Thus, the only feasible thing is the combination of fixed but adjustable (crawling peg) and free interest rates. The fixed rates should be few in number and for limited uses. The risks of free-active rates, however, are that they may be too high and cause too wide margin between the passive and active rates, which makes financial intermediation improfitable. The alternative to freely differential interest rates could also be the creation of private liabilities with specified maturities. In developing countries, the use of differential interest rates to achieve development objectives may involve the establishment of appropriate specialized institutions similar to the World Bank (IDA).

29. While in developed countries, the monetary authorities play a simple supervisory and monetary control role in the economy, in developing countries, the monetary authorities have a relatively much more important role as an intermediary between savers and investors and a highly activist credit-allocating role to play. Because of the fragmentation of the economy, the monopolistic or oligopolistic banking system serves the well-established urban borrowers. The financial needs of small-scale urban operators and the population of the rural areas are neglected or met by the informal small-scale moneylenders. The central bank, the guardian of the financial system, may subsidize commercial banks and other financial institutions so as they maintain differential interest rates for rich urban borrowers and for poor rural borrowers. This financial dualism of an underdeveloped economy dictates the use of differential interests to particular situations. Thus, special considerations should apply to situation where a large segment of the population (the urban poor and rural population) has no access to the services or credit facilities of savings or credit institutions.

30. The development objectives, the need for transformation of the economy also dictates the use of differential interest rates. The

primary role of interest rates for bringing equilibrium in the demand for and supply of funds should be subordinated to the need for the transformation of the economy. A development strategy that relies on financial savings as a major source of financing transformational investment requires differential price or non-price incentives in order to stimulate saving in financial form and, where relevant, capital inflows. Of particular importance is the need to minimize the divergence between the allocation of resources based on the free market and the allocations based on developmental priorities. There is always the possibility in developing countries that uncontrolled operations of free market forces may result in a disproportionate allocation or "misallocation" of available funds to "low priority" areas as against "high priority" areas due to market imperfections, structural rigidities and other socio-cultural factors.

1.3 The Use of Interest and Selective Credit Policy

(a) The Use of Interest Rates

31. In all studies on interest rates, what emerges is that irrespective of the nature of the developing economy, interest rates are generally perceived in developing countries to perform at least potentially, the following basic functions:

(i) Interest rates are seen as the reward for accumulating financial assets and as an incentive for postponing current consumption. In this respect, interest rates play the role of helping to mobilize voluntary domestic savings.

(ii) Interest rates are taken as the measure of the cost of capital to borrowers. As such, interest rates can be used to influence the level of demand for capital resources and as a rationing device for the efficient allocation of borrowed funds among alternative investment.

(iii) When the rate of return on foreign financial assets and exchange rate expectations are brought into consideration, interest rates can play the role of influencing the allocation of national wealth between domestic financial assets and foreign financial assets.

(iv) In an inflationary situation, interest rates are perceived as constituting a policy instrument that can, given certain expected rates of inflation, influence the allocation of the public's wealth between financial assets denominated in national currency and inflation hedges denominated in unproductive non-currency goods. In this specific situation, it is the real rate of interest that is considered relevant.

32. From the four roles, it should be clear that, for most developing

countries, a purposive interest rate policy has a multiplicity of aspects, each of which may be relevant or dominant given the phase of development and the peculiar issues that have to be addressed during that phase. For example, an interest rate policy may have to reconcile itself to the conflicting need to attain a certain level and pattern of investment as well as attract enough savings. It is from such possible conflicts of role that, in many cases, there have been difficulties in justifying one course of determining one interest rate policy against another as is amply illustrated by the empirical evidence in the next section.

(b) The determination of interest rate policies

33. Contrary to traditional belief, the question of interest rate determination is so complex that it is not really appreciated that more often than not, there is no good economic foundation to determine what the level or structure should be. Even in the so called efficient free-market determination of interest rates, it is rarely fully understood why the free market can lead at times to much higher or to much lower rates than the equilibrium rate. While, in essence, the free-market determined real interest rate has the inevitable implication that the equilibrium real rate of interest must be positive because it must be equal to the rate of return to capital,, yet, as is illustrated in TAble 1 below, the real interest rate even in the United States over a ten-year period exhibited such unpredictability that in some cases it was highly negative, while in other cases it was highly positive.

Table 1
Nominal and real interest rates in the United States, 1974-1984

Year	prime rate	Inflation rate	Real interest rate
1974	7.9	8.9	-1.0
1975	5.8	10.2	4.4
1976	5.0	3.7	1.3
1977	5.3	10.7	5.4
1978	7.2	6.7	0.5
1979	12.7	9.4	3.3
1980	15.3	8.6	6.7
1981	18.9	15.2	3.7
1982	14.9	6.0	8.9
1983	10.8	3.4	7.4
1984	12.0	4.4	7.6

Source: IMF International Financial Statistics (several issues).

34. Further, it is also rarely appreciated that empirically a number of developed international economies have actually had government-determined interest rates. It is well documented that a number of OECD countries fixed their interest rates either through government ceiling or by mutual agreement among banks and savings institutions.

35. The World Bank surveyed interest rate policies in selected developing countries and it was found that empirically all countries surveyed maintained substantial direct financial control with three types of typical instruments namely (i) regulations on the portfolio composition i.e. requirement to devote a certain portion of lending to specific activities; (ii) control over re-discounting of credits to priority sectors usually at subsidized rates; and (3) control of financial intermediaries. Hence it was observed that:

- all of the sampled countries also maintained some form of administered interest rate regime; the principal differences being in the relative size of the directed credit programmes and in the interest rate differentials between preferential and non-preferential credits;

- all countries exercised control over the allocation of credit with the fraction of credit affected by direct allocation ranging from 100 per cent in Nigeria to nearly 50 per cent in Peru.

- the differentials between rates on deposits, general lending and preferential lending rates were small in low inflation countries

and quite large in the high inflation countries.

36. The empirical evidence on Africa also shows that in most African countries, the interest rate structure has been shaped by the control and regulatory measures of the monetary authorities. Most countries were involved in the provision of not only the general guidelines on interest rate determination but of detailed interest rate structures as well.

37. In most developing countries, particularly in African countries, interest rates are determined administratively, typically through legally imposed ceilings on lendings and deposit rate. In many of these countries, official control over interest rates is exercised simply by virtue of the fact that all banks, or the largest banks are nationalized and the influence of the government on their activities is often powerful. In some countries, however, interest rates are administered in a flexible manner in an attempt to maintain market related interest rates that follow more or less closely the movement of interest rates that would be produced by the forces of supply and demand. In others, however, the administration of interest rate policy lacks this flexibility, and over time, large divergences between administered and market rates emerge.

38. Overall, the following reasons for selective credit in general and differential interest rates in particular, have been advanced as valid in the case of developing countries:

(i) the serious imperfections in the financial markets of developing countries;

(ii) the thinness of the financial structures because of low incomes, limited degree of monetization of economies and the large size of the informal sector;

(iii) the dominance of a few financial institutions which can exercise monopolistic or oligopolistic control over levels of interest rates and the allocation of credit;

(iv) the need to offset other serious distortions in the economy (e.g. in investment patterns);

(vi) worries about the possibility of interest rates causing inflation either through their direct impact on costs or through the indirect effect of expectations.

(c) The Effects of Interest Rate Policies

39. In order to appropriately evaluate differential interest rate policy as an alternative policy instrument, it is important to first evaluate the effects that other interest rate structures - government-

determined or free-market ones - have had in developing countries. In this respect, empirical evidence is examined with respect to the effects of interest rate policies on (i) savings, (ii) investment, (iii) inflation and (iv) income distribution.

(i) Interest Rate Policies and Savings

40. It is paradoxical that most empirical results have not been able to establish a clear positive relationship between the level of savings. Theoretically it is urged that the elimination of financial repression or controlling of interest rates would raise the average rate of return on savings and would, consequently, result in a continuing increase in the flow of savings as a proportion of income. Surprisingly empirical results have rarely validated this theoretical proposition.

41. The IMF recognized the view that interest rates play only a minor part in the determination of savings is sometimes supported by empirical tests that reveal only a weak response of savings to interest rates. In a study of african countries, it is shown that changes in the real interest rate have mixed results. While in some countries a positive correlation exists between savings and the real interest rate, in others, a negative relationship prevails. This stems from the fact that in several developing countries, a large proportion of savings is not held in the form of financial assets like in advanced countries but in the form of real assets (real estate, consumer durables, precious metals, foreign assets, etc.). The importance of this empirical ambiguity about the effect of real interest rates and savings is that policy makers should not be dogmatic in designing interest rate policies. Rather, they should be flexible enough to take into account the realities of their economies.

(ii) Interest Rate Policies and Investment

42. One of the major reasons for proposing a differential interest policy as in AAF-SAP is the concern about productive investment. It is therefore basic to have a clear idea about how interest rates - controlled or market-determined - have empirically influenced the volume and productivity of investments. It is in this context, worthy to first recall that theoretically, explanations of investment behaviour posit an inverse relationship between interest rates and investment demand.

43. Empirically, studies in developing countries have shown the following general trends in the relationship between interest rate policies and investment:

- tendency of rises in interest rates to reduce the level of investment by raising the cost of financing certain investment above their possible rates of return;
- because of the substitution of alternative mechanisms to raise

funds, the empirical significance of interest rates as a determinant of investment is often difficult to establish in developing countries;

- governments have usually benefitted from the adoption of low or preferential interest rates since they are usually the biggest borrowers. If government credit is directed to finance social services such as education, health etc., then the use of preferential rates has usually been justifiable;

- most interest rate policies, especially in African countries have tended to fail to discriminate adequately between more and less productive investment possibilities.

(iii) Interest Rate Policies and Inflation

44. In SAF-SAF, it was proposed that the real interest rates -- the nominal interest rates adjusted with the expected rate of inflation -- should be kept positive in order to increase the productivity of investment, since economic development depends not only on the volume but also on the productivity of investment; that is, on the social rates of return. In the case where inflation rates exceed nominal interest rates, a negative real rate of interest occurs and this will tend to encourage speculative activities with low marginal rates of social return, such as the accumulation of inventories for inflation hedging purposes and speculative commodity or real estate transactions and thus reduce the productivity of investment. The transfers of financial resources into inflation hedges will further aggravate the scarcity of funds for productive and transformational investment and add to inflationary pressures.

(iv) Interest Rate Policies and Income Distribution

45. There is, as yet, no solid empirical studies that show the effects of interest rates on income distribution. Some studies have argued that low interest rates - across the board or for specified types of credit - do not have the redistributive impact often expected of them. For example, it is contended that for agricultural credit repressed or preferential interest rates may have perverse effects because of the tendency for larger units to receive the lion's share of preferential credits. Other studies, however, argue that if well managed, preferential interest rates do benefit the poor farmers, small businesses and sectors like housing which meet the needs of low-income households.

(a) Introduction

54. In terms of designing and implementing selective credit and differential interest policies in developing countries Central Banks have the most natural and pivotal role. This is not only because the Central Bank usually has the role and powers to regulate the portfolio composition of financial intermediaries but has or can be empowered to have an array of tools which it can use in a number or ways to ensure the desired direction of credit. Here we consider three of the main tools that Central Banks usually use for selective credit control.

Direct lending by the Central Bank

55. The use of the Central Bank to directly channel resources has usually accounted for a fairly large proportion of total lending by the banking system. In Africa in the 1980s it accounted for more than 50 per cent in ten countries between 30-50 per cent in three countries and between 25 and 30 per cent in two countries out of a sample of 10 countries.

Reserve or liquidity requirements

56. Many developing countries' Central Banks make resort to the reserve or liquidity requirement tool to effect selective credit control although different countries have different versions of the policy instrument. In Bangladesh, for example the reserve requirements approach was a percentage (5 per cent in early 1980s) of total deposits of commercial banks. This form is the most common. However, Mexico's experiment on reserve requirement was quite unorthodox. In this case the commercial banks' liabilities, without counting operations which the Central Bank could declare exempt, had to be kept as assets of the commercial banks according to the following elaborate structure:

- up to 50 per cent as deposits with the Central Bank which could utilize them in "high priority" sectors;
- up to 25 per cent in assets determined by the Central Bank according to its selective credit policy;
- 25 per cent in other assets defined by the banking law.

Specific Directives and/or Guidelines

57. This approach has been used often extensively, in a number of African countries such as Nigeria. It could apply both to the quantitative and qualitative directives on credit. Nigeria has, at one time, extensively used this tool (especially guidelines) to exercise direct control over a large portion of the country's financial resources and transactions. The tool can be applied in a number of ways and consequently has often required a lot of care in designing and implementing. In some countries credit ceilings or quotas are

established for different institutions. To ensure compliance violation can be penalized by increments in cash reserves or illegibility to some types of Central Bank financing. In other versions, a bank or group of banks could establish a specific agreement to provide to certain enterprises all their credit according to set-out norms of an agreement. Other variations have included the use of guidelines to deny banks the possibility of financing certain types of activities which the authorities deem speculative and which detract funds from the country's basic development objectives.

(iii) The Fund-Creation Approach

58. One approach in selective credit control which has been widely used in Latin American countries but has been relatively neglected in Africa is that of creating special Funds to perform specific credit allocative functions. Of course, in a way this is closely related to the creation of special financing institutions and could perhaps most effectively be designed along with the establishment of special institutions.

59. What, however, needs to be stressed is that special funds have been created to break specific bottlenecks in certain sectors or regions. These funds have also been used to provide technical assistance, guaranties and other special facilities such as regional integration. The system of fiduciary funds allows an evaluation of projects, considering not only economic, but also their social and technical aspects. The funds, furthermore, can combine budgetary contributions with external and internal resources, tailoring them to their financing conditions (amounts, interest rates, maturity of loans, etc.) to the needs of the project. In such cases the special funds can also provide technical assistance for the formulation and evaluation of projects to be financed. Fiduciary funds can be made to operate at differential interest rates which are determined by the Finance Secretary and the Central Bank.

(iv) Involvement of the Informal Financial Sector

60. It is well documented that there is in Africa, an important amount of financial resources that do not enter the formal financial market (banks, insurance, etc). If a government wishes to tap these resources and direct them to special activities, then it needs to formulate specific policies directed at the informal financial sector. What is required in this regard is firstly to establish a fuller understanding of the informal money markets. Secondly, there is need to provide a legal framework for the operation of these markets. Thirdly, selective credit policies aiming specifically to the mobilization and channelling of the resources in the informal sector should be formulated with emphasis on community and popular participation approaches.

(c) Approaches for differential interest rates

[illegible] countries have different interest rates for different sectors of the economy. Nothing is known about other countries which have different interest rates for different types of loans depending on their priority setting and development objectives. To illustrate the design and application of such differential interest rates, cases of loans to commercial banks in some countries are cited below:

Table 3

The Pattern of Differential Lending Rates in Selected Developing Countries, Year-end 1982

A. Bangladesh

	Nominal
Agricultural production	12.5%
Industry	14.5%
Specific industries in less developed areas	11.5%
Export credit	
traditional items	12.0%
non-traditional items	11.5%
Loans for small scale industries	13.0%
Loans given in the Chittagong Hill Tracts	11.0%
General loans	16.0%

B. Nigeria

	Nominal
General Minimum	10.5%
General Maximum	14.0%
Preferred sector maximum	12.0%
Less preferred sector maximum	14.0%
Agricultural credit guarantee scheme	7.0-8.0%
Residential housing scheme	
Less than 100,000 Naira	7.5%
Agricultural production	8.0%

Table 2 (contd.)

	nominal
E. Thailand	
Loans and overdrafts	10.0%
Discount rates (rediscounted from the Bank of Thailand)	
Export bills	7.5%
Bills from industrial undertakings	7.0%
Bills from purchase of	
agricultural products	7.0%
agricultural bills	10.0%

Source A: The Bangladesh Bank, "Economic Trends."
Source B: World Bank, "Financial Intermediation in Nigeria."
Source C: Central Bank of Kenya, "Economic and Financial Review"
Source D: The Bank of Thailand, "Quarterly Bulletin."

Section III - PROPOSALS FOR THE APPLICATION OF DIFFERENTIAL RATES AND SELECTIVE CREDIT IN AFRICA

(a) Introduction

62. From the foregoing analysis of the theoretical and empirical bases for differential interest rates and selective credit control as implementable policy instruments it is now pertinent to examine the basic issues of strategy and make specific proposals for their application in African countries. It should be noted at the outset that while some analysts seem to have unshakable belief in the superiority of the free market, empirical evidence shows that there are compelling reasons for developing countries to apply differencial interest rates and selective credit controls. Of particular importance is the need to minimize the divergence between the allocation of resources based on the free market and the allocations based on developmental priorities. There is always the possibility that uncontrolled operations of free market forces may result in a disproportionate allocation or 'misallocation' of available funds to 'low priority' areas as against 'high priority' areas due to market imperfections, structural rigidities and other socio-cultural factors.

63. It has been amply demonstrated that differential interest rates and selective credit control can be fruitfully applied for the legitimate

67. There is, however, the problem of how long it might take to bring down the rate of inflation to an acceptable level and what the interest rate structure should be in the intervening period. And is indeed during this period that a discriminatory interest rate regime with very high nominal rates set for speculative and low priority activities and a lower rate for the priority sectors, becomes very relevant.

(b) Designing of Differential Interest Rates Policy in Africa

68. It should be recalled that the advocacy for the use of differential interest rates in African countries was for selective nominal interest rates in such a way that interest on loans for speculative activities would be greater than the rates on loans for productive activities, such that the resulting weighted real interest rates for savings would be positive.

69. Noting that there is not one single interest rate even in a free market economy, it is important to point out that there is nothing new about differential interest rate policy. It is a fact of the economic life of both developed and developing economies. Rather the difference lies in the extent to which the policy is applied. In the case of developing countries the policy would be to bring about a process of deliberate transformation while in the latter the purpose might be merely to control or direct consumption.

70. Thus, for developing countries aiming at transformation, differential interest rates can promulgate clearly define specific and sharply focussed objectives to which the policy is to be directed. Such objectives could include, depending on the circumstances of the country, the following:

- domestic food self-sufficiency;
- small-scale and informal sector indigenous enterprises;
- Keeping down the cost of servicing the public sector debt;
- generating economic growth through reduction of speculative activities and shifting resources to productive activities;
- to favour special disadvantaged groups or regions in a country;
- alleviating abnormal adjustment costs that financial and non-financial enterprises might face;
- control inflationary pressures that might result from high nominal interest rates;
- to steer by discretion the overall interest rate structure towards equilibrium.

71. But in pursuing the various objectives with the use of differential interest rates due attention must be paid to the specific characteristics of the society and the economy especially with respect to the following:

- saving habits;
- extent of monetization of the economy;
- sources of inflationary pressures;
- size of government borrowing and the role of borrowed funds;
- magnitude and role of foreign capital;
- degree of financial intermediation;
- importance of the informal sector;
- degree of inequalities in financial power between different categories of producers.

72. After taking these and other pertinent factors that will affect the intensity and degree of success in the application of a differential interest policy, the government could choose a specific mechanism or a combination of mechanisms for the implementation of credit control and DIRP. In choosing between the different mechanisms, it is essential to stress that due account should be paid to the following:

- administrative mechanisms should be clear-cut with unambiguous goals and priorities;
- the simpler the mechanism the easier to implement and the more likely is its success;
- each mechanism should have a well defined time-frame for its application and/or review of its intended effects;
- the mechanism should be enforceable and, preferably, it should have built-in structures to ensure efficiency and compliance.

(c) Financing of Differential Interest Rates

73. Theoretically, when market forces of supply and demand operate freely and perfectly, additional investment and additional saving to finance it, is generated without necessarily having an increase in output, since the initial excess demand for credit will tend to push up

lending rates and thereby stimulate an increase in deposit rates, so as to equate saving and investment. That is, higher deposit rates will attract more savings (resources) in the banking system which the high lending rates will reduce the desired investment. Thus in a perfect market for deposits and savings an increase in economic growth as a result of increases in interest rates would depend on the differences in the elasticities of savings and investment with respect to the interest rate. On the other hand, when the interest rates are regulated by government - as proposed here at least until structural rigidities are removed or substantially reduced - the necessary real savings and consequently the credit expansion of the banking system can be rationed so as to finance increased investment demand that generates increased economic growth by obviating the elasticity differences.

74. However, it is also possible and feasible to establish differential interest rates in such a way that no particular financing is required. This can be achieved by setting lending rates for speculative and low priority activities at a level which compensates for the lower lending rates in priority sectors. Indeed, banks can manage their lending portfolio in such a way that the interest rates on speculative activities more than compensate for the lower interest rates on priority sectors it is more than probable that an average positive real interest rate for savings can be maintained.

(d) Selective Credit Control Policies

75. It has been amply demonstrated that government intervention in credit markets is a common phenomenon in many developing countries. It was shown that controls - whether discretionary or direct - are practised the world over. Thus, the relevant and real issue of selective credit control policies is its impact on the economic growth and development and not its justification.

76. To recap on the use of selective credit, it should be recalled that government intervention in the credit market rests on the discrepancies between social and private benefits as a consequence of market imperfections in developing countries as well as social externalities. These discrepancies show themselves in (a) the perceptions regarding the credit capacity and the real possibilities or profitability (social and economic) and security of projects in the different sectors; (b) the existence of external economies for credits to priority sectors which may have multiplier effects that are often not taken into account by the financial institutions or the users of credit and most importantly (c) the unproven premise that free markets (financial or other) will necessarily result in the desired goals of social and economic transformation.

77. As such, selective credit control policies should be adopted in African countries in order to influence the composition of aggregate expenditure and real resource allocation. While the argument against

the use of such policies is that the channelling of financial flows may not necessarily have the desired effects on the real sector of the economy because of the fungibility of financial assets and liabilities. Empirical studies in developed and developing countries would tend to sustain the proposition that government efforts to allocate credit among selected economic sectors can be and have been effective at least in the short- to medium-term.

78. More fundamentally, selective credit control must be seen and used as a basic development policy. Firstly, it is often the case that financial institutions (including banks) underestimate credit worthiness and overestimate the risk, administration and collection costs associated with extending loans to certain sectors such as agriculture. Also these institutions could tend to perceive projects that have costs which are higher than the true social costs. Indeed, many financial institutions do not take into consideration the external benefits which expansion in the "high priority" sectors do yield for the rest of the economy. Secondly, the effective attraction of resources to the priority sectors can become severely constrained since in their productive activity, they may not show high rates of return. However, from an optimising point of view the value created by activities of such sectors can be significant enough to warrant the directed use of society's resources in these activities. In such a context there is ample justification for a tax cum subsidy to bring about alignment of social returns for the whole society with the positive externalities flowing from the "high priority" area. Also it becomes evident that there is need for institutions that have comparative advantage in assessing credit worthiness and in administering and servicing loans to the sectors considered to be of "high priority".

Section IV: Trade-offs and Complementarity between Differential Interest Rate and Selective Credit Policies and other Policies

(a) Introduction

79. In the context of overall macro-economic policy, the interest rate and selective credit policies cannot be divorced from such other policies as exchange rate policy, trade policy, monetary and fiscal policy. The relationship between the rate of interest and the rate of inflation has been alluded to above, just as there is a link between the rate of inflation and the exchange rate and the magnitude of fiscal deficits. Thus in applying credit control policies in general and differential interest rate policy in particular, due recognition must be taken of the many and complex inter-relationships (complementarities and trade-offs) among all the different policies. In general, there are some very important but not well understood interplay between policies in the financial markets and the real economy especially as regards the

differences in financial returns and social and economic returns. In most developing countries, there is a strong link between fiscal and monetary development especially because in these countries the banking system is a major source of domestic borrowing in financing the fiscal deficits. The relationships between the fiscal gap and domestic liquidity is almost automatic since the higher the fiscal deficit, the larger is the budget's impact on the expansion of domestic credit. Recognizing such complex interrelationships between the real economy and the financial markets, it is crucial that the government closely co-ordinates its monetary, fiscal, exchange rate and trade policies.

(b) Monetary - Credit Policy

81. The monetarists have often argued that an increase in the amount of money in an economy will have its impact on general economic activity through changing supply and demand for various goods and services. The additional money may have its impact transmitted to general economic activities by increasing the amount of lending activity thereby influencing investment decisions and consumption levels. Alternatively, the additional money may simply be spent in buying goods and services and thus directly affects the supply and demand in the market for specific goods which eventually translates in inflationary pressures. Whatever the transmission mechanism it is highly unlikely that supply and demand for different goods and services will be affected equally such that all prices are affected equally. Relative prices will change and this will have an effect on the allocation of resources leading into an interaction with credit control policies.

81. Even the best financial sector policy regime is unlikely to function properly in the face of contradictory signals coming from the real-side of the economy, i.e., where financial and economic rates of return differ widely. For example, if the nominal interest rate is below the inflation rate as in many developing countries (particularly those of Latin America) there will be an increasing discrepancy between ex ante aggregate demand and aggregate supply, resulting in an acute shortage of foreign exchange and further acceleration of inflation which, would further depress the real rate of interest. As a result, the real value of domestic financial savings will decline, thereby depressing the banking sector's funds and thus the availability of credit; while the demand for credit would be stimulated by the negative real interest rate.

82. In response to the emerging credit shortage, the government (monetary authorities) might wish to try to introduce various regulations in order to allocate the existing credit through selective credit controls. Assuming that the government attempts to finance such selective credits through running a fiscal deficit which is financed largely by the monetary expansion (deficit financing through creation of

new money in the economy) it is possible that initially, there will be supply responses as under the AAF-SAP assumption of the directly productive sectors. Nevertheless, the monetary expansion may result in excess aggregate demand over supply which will bring about increased inflationary pressures and a further decline in the real interest rate as well as a further reduction int he public's demand for domestic financial assets (saving deposits with financial institutions). But the reduction in the real interest rate could stimulate the desire to invest and this again will tend to enlarge demand and supply in the goods market and a further acceleration of inflation, unless other corrective policies are adopted as inter-related.

83. This is why AAF-SAP assumes that the real interest rate resulting from the differential lending rates must be kept positive in order to stimulate the supply of financial assets (increased saving deposits in the banking system on the basis of which credit expansion to productive sectors can be made). Therefore, it may be necessary to couple differential rate and selective credit policies with price control policies so as to keep real interest rate positive. However to the extent that positive real interest rates promote economic growth and development, the revenue base of the government must also be commensurately expanded to compensate for the increased public debt from the use of explicit subsidies to the productive sectors of the economy.

84. In order to help in overcoming the development obstacles such as shortages of capital for investment and to avoid the limitations of differential interest rates and selective credit policy and to implement successfully such a policy, specialized financial institutions such as development banks, sectoral credit institutions, etc. should be established. These institutions provide priority activities with credit they need at a subsidized low interest rates, supervise their performance, channelling the available savings into productive investment, create incentives for priority productive activities and provide projects with technological advice and assistance. The finance of these institutions may come from private initiatives as well as from annual appropriations or treasury advances.

(c) Fiscal Policy

85. Public sector borrowing to finance the fiscal deficit and public enterprises is also an important factor in developing countries. Regulations often exist forcing the system to hold low - interest government debt: either directly, in the intermediaries' portfolios, or indirectly, through central bank reserve requirements which, in turn, are used to provide low-interest Central Bank credit to the public sector. Both the directed credit programmes and the public sector borrowing tend to reduce the supply of credit available for low-preferred borrowers. Increased competition for the remaining credit drives up interest rates on non-preferential credits. The government

should compensate the financial sector for its lost revenues on low interest credit with credit subsidies.

86. Since the differential interest rate policy is a multidimension approach to financial sector policy, it should also be will co-ordinate with the fiscal policy so as to direct resources into a sector or subsector deemed by the authorities and development planners to have its socially most productive uses, to increase the flow of income towards identifiable groups in the population, in particular the rural population and to provide a stable financial environment which will encourage development. To the extent that positive real interest rates are achieved, with subsequent increase in savings, investment and economic growth, the revenue base of the government may also expand so as to compensate for the increased cost of the public debt caused by subsidized interest rates. The public debt can also be financed through issuing government bonds and other means so as to bring the fiscal deficit and the resulting inflationary pressures under control.

(d) Trade and Exchange Rate Policy

87. In addition to the monetary and fiscal policy issues it is also important to consider the impact of interest rate policy on the external sector, particularly in an open economy. Interest rate differentials adjusted for the expected rate of depreciation of domestic currency may encouraged residents of a country to hold foreign exchange receipts, including those arising from workers' remittances, as foreign currency deposits, rather than converting them into local currency. It may also make holders of free accounts reluctant to sell foreign currency for trade and other transactions. The maintenance of uncompetitive interest rates on domestic currency deposits may also induce the placement of foreign currency deposits not only in domestic banks but also in non-resident banks. In particular, it encourages workers or firms to keep their financial assets outside the country, implying capital flight. Therefore, the authorities should see to it that the domestic interest rate corrected for anticipated depreciation of the domestic currency is in line or exceeds the interest rates prevailing in world markets so as to encourage net private capital inflows. This could be done by keeping positive real interest rates together with appropriate exchange rate policies.

88. The reduction of the demand for domestic financial assets in response to a decline in real interest rates may also have important effects on the balance of payments of a country with an open economy and a free movement of capital. The fall in the demand for domestic financial assets will also cause an increase in the demand for foreign assets resulting in capital outflows to the countries where there is a higher deposit interest rate than the domestic one, especially when the exchange rate is overvalued. To counteract such capital outflows, the government should take other measures such as increased official borrowing, drawing down on international reserves or introducing severe

restrictions on capital movements, so as to insulate the domestic financial system. On the other hand the maintenance of positive real interest rates can substantially reduce capital outflows and, as is argued in the interest parity theory, to the extent that the domestic interest rate corrected for anticipated depreciation of the domestic currency exceeds the interest rates that prevail in world markets.

39. But, in practice, the adjustment of interest rates to those of developed countries corrected by the expected rate of devaluation and the free movements of foreign capital could be detrimental to the nascent and fragile money and capital markets of the developing African countries, thereby compounding problems of monetary stability and capital formation. The pursuit of profits arising from interest rate differentials could be harmful to financial growth and the balance of payments. Therefore, until corrective and remedial policy action is undertaken to transform the economy in general and the trade and payments systems of African countries, budgetary imbalances, financial dualism, and structural rigidities in particular, liberalization of interest rates alone could lead to a perpetuation of distortions in already imperfect financial markets dominated by very few financial institutions.

Section VI: CONCLUDING REMARKS

90. The production base in most developing African countries is narrow both in terms of size and in relation to the range of goods produced. The service sector which includes the financial services was stimulated in the previous decades while in comparison the commodity producing sectors languished. Progress has been impeded in most developing African countries by the lack or inadequacy of various ingredients of development. The first impediment is a shortage of capital necessary for investments. The second immediate is the lack or insufficiency of money and capital markets and an effective mechanism for channeling into productive investment a sufficiently large proportion of savings. To stimulate more efficient domestic production of tradeable and non-tradeable commodities, there is need to improve the incentive system and the allocation of resources that now govern domestic production. This calls for an appropriate interest rate policy that makes available more resources, both domestic and foreign, for development, improves capital efficiency and creates stable economic environment. These objectives can be achieved through differential interest rates policy as suggested in AAF-SAP through the use of selective nominal rates in such a way that interest rates on loans for speculative activities would be greater than the rate on loans for productive activities, such that the resulting weighted real interest rate for savings would be positive, leads to increased mobilization of domestic savings, reduction of speculative activities and shifting resources to productive sectors.

91. The financial sector policies in most developing countries during the last two or three decades focused on keeping low real interest rates so as to stimulate investment. However, the rising world inflation which fueled domestic inflation of these countries had further depressed real interest rates to the negative level and this brought detrimental effects on the mobilization of savings, the allocation of resources and the distribution of income. As a result, policy recommendations often emphasized that lending and deposit rates should be positive in real terms and that intermediation spreads should provide an adequate return to financial institutions. The freeing of interest rates, the need to keep the real rate positive and the increasing inflationary pressure have combined to produce high nominal interest rates which, in turn, discouraged investment and allocated the scarce investment resources away from productive activities, also relatively low rates of return to speculative activities with quick and high rates of return. However, financial markets and interest rates cannot be considered in isolation with what goes on in the rest of the economy. Thus formulating an "appropriate" interest rate policy becomes exceedingly difficult task involving far more than one single real rate of interest.

92. In most developing countries, the rates are either set by the government or reflect such statutory rate ceilings or floors. Government intervention in financial markets is inevitable even in the industrialized countries. First, reserve requirements and taxes affects

the level of interest rates in all countries. Second concerns restrictions placed on interest rates in terms of raising lending and deposits rates or establishing ceiling on interest rates. Thus the question that should be raised in developing countries is whether or not the government has set the rates that stimulate production rather than speculative activities.

93. To adopt consistently positive real interest rates that are high enough to encourage savings and low enough to stimulate investments calls for simultaneous policy action on the nominal rates and the rate of inflation. It was argued in this paper that the combination of both fixed but adjustable (crawling peg) and free nominal interest rates is better. The fixed rates will be applied to highly productive priority activities that contributes effectively to the structural transformation of the economy; and free nominal rates will be applied to the speculative activities. In both cases, there will be need to stabilize prices through a sound monetary, fiscal and exchange rate policy so that the nominal rates remain above the inflation rate. Since the expected rate of inflation is rarely known with accuracy, there will be need to adjust the interest rate structure (real) through adjustment of the realized and expected rates of inflation. Fiscal discipline and reasonable growth of credit and money supply are among the prerequisites for fighting against inflation including price control.

94. Differential interest rate policy is only one of the instruments that were recommended in order to liberalize the economy and improve the financial situation of developing African countries. Its effectiveness would be enhanced if it is appropriately used in conjunction with other allied financial policies such as exchange rate, income, fiscal, monetary and credit policies including some institutional reforms.

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